FIRE STATION 31
HAZARDOUS MATERIALS TESTING
SUMMARY OF SAMPLE RESULTS
(as of 1/30/04, revised)

Sample Type	Detection Limit	Outdoor Result	Sample Count[a]	Min. Result[a]	Median Result[a]	Max. Result[a]	Screening "Action" Limit[c]	Units [b]
Biological Agents								
Bacteria count (bulk dust)	7	NS	13	32,180	98,500	3,554,000		CFU/g
Bacteria-surface wipe	1	NS	16	100	878,200	>8,200,000		CFU/ in^2
Bacteria-airborne viable count	7	<7 - 58	10	29	91	1,515		CFU/m^3
Endotoxin-air	0.01	0.27	6	0.17	0.93	1.7	> 100	EU/m^3
Mold count (bulk dust)	7	NS	13	7,000	42,580	1,728,000		CFU/g
Mold spore count-air	1	26,980	10	5,764	17,947	30,155		fs/m^3
Mold-surface wipe	1	NS	16	<100	159,100	2,010,000		CFU/ in^2
Mold-airborne viable spore count	7	324 - >2,900	50	189	906	2,326		CFU/m^3
Pesticides								
Chlorinated pesticides-soil-chlordane (alpha + gamma)	80	NA	3	ND	590	760	500 (EPA)	µg/kg
Chlorinated pesticides-soil-DDT	3.8	ND	3	ND	ND	11	1,000 (MTCA)	µg/kg
Chlorinated pesticides-soil-heptachlor epoxide	40	NA	3	ND	ND	67	70 (EPA)	µg/kg
Chlorinated pesticides-soil-total other	40 – 4,000	NA	3	ND	ND	ND		µg/kg
Chlorinated pesticides-wipe	0.1	NA	7	ND	ND	ND		µg/ sample
Chlorinated pesticides-air	0.00004	NA	7	ND	ND	ND	0.5 DDT (REL)	mg/m^3
Organophosphorus pesticides-wipe	0.1	NA	7	ND	ND	ND		µg/ sample
Organophosphorus pesticides-air	0.000042	NA	7	ND	ND	ND		mg/m^3
Pentachlorophenol-air	0.004	NS	8	ND	ND	ND	0.5 (OSHA)	mg/m^3
Products of Combustion								
Diesel particulate matter-air-total carbon (C)	0.006 (0.00073 elemental C)	0.015	5	0.013	0.021	0.033 (0.0037 elemental C)	0.02 as elemental C (ACGIH withdrawn notice of intended change)	mg/m^3
PAH-air-naphthalene	0.0003	ND	5	ND	ND	0.0004	0.1 as cyclohexane extractable fraction (REL)	mg/m^3
PAH-air-total other PAHs	0.00003 - 0.0016	ND	5	ND	ND	ND		mg/m^3

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PAH-surface dust-naphthalene	0.3	ND	6	ND	ND	3.7		µg/ sample
PAH-surface dust-total other PAHs	0.03-0.8	1.018	6	ND	0.225	2.0		µg/ sample
Carbonaceous particles-surface dust	1	NS	13	10	25	25		%
Metals								
Arsenic-air	0.0021	ND	6	ND	ND	ND	0.01 (PEL)	mg/m^3
Cadmium-air	0.000034	ND	6	ND	ND	ND	0.005 (PEL)	mg/m^3
Chromium-air	0.00021	ND	6	ND	ND	0.0007	0.001 (hexavalent) (PEL)	mg/m^3
Lead-air	0.00043	ND	6	ND	ND	ND	0.05 (PEL)	mg/m^3
Lead-drinking water	1	NA	6	<1	<1	2	15 (EPA)	µg/L
Lead-soil	46	NS	3	<46	91	1,500	250 (MTCA Method A residential)	mg/kg
Lead-surface wipe	13 - 25	NS	36	ND	24	6,600	40 (EPA - residential floors)	$µg/ft^2$
Mercury-air	0.00008	0.00037	7	0.00016	0.00024	0.00051	0.05 (PEL)	mg/m^3
Radon								
Radon-air	NAv	NS	6	0.2	0.4	0.7	4 (EPA)	pCi/L
Other Particulates								
Asbestos-air (PCM)	0.001	NS	5	<0.001	<0.002	<0.007	0.01 (EPA)	f/cc
Respirable dust-air	0.1	NS	12	<0.1	0.1	0.3	5 (PEL)	mg/m^3
Silica-air-quartz	0.006	NS	12	ND	ND	0.006[d]	0.05 (REL)	mg/m^3
VOCs								
Acetone (67-64-1)	0.25	1.7	7	5	22	120	1,800,000 (PEL)	$µg/m^3$
Benzene (71-43-2)	0.26	6.8	7	5.4	6	25	3,200 (REL)	$µg/m^3$
Benzyl Chloride (100-44-7)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Bromodichloromethane (75-27-4)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Bromoform (75-25-2)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Bromomethane (74-83-9)	[e]	ND	7	ND	ND	ND		$µg/m^3$
2-Butanone (MEK) (78-93-3)	0.25	ND	7	ND	1.2	4.1	590,000 (PEL)	$µg/m^3$
Carbon Disulfide (75-15-0)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Carbon Tetrachloride (56-23-5)	0.25	0.52	7	ND	0.37	4.4	12,600 (PEL)	$µg/m^3$
Chlorobenzene (108-90-7)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Chloroethane (75-00-3)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Chloroform (67-66-3)	0.25	ND	7	ND	2	6.5	10,000 (PEL)	$µg/m^3$
Chloromethane (74-87-3)	[e]	ND	7	ND	ND	ND		$µg/m^3$
Dibromochloromethane (124-48-1)	[e]	ND	7	ND	ND	ND		$µg/m^3$

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1,2-Dibromoethane (106-93-4)	[e]	ND	7	ND	ND	ND		µg/m^3
1,2-Dichlorobenzene (95-50-1)	[e]	ND	7	ND	ND	ND		µg/m^3
1,3-Dichlorobenzene (541-73-1)	[e]	ND	7	ND	ND	ND		µg/m^3
1,4-Dichlorobenzene (106-46-7)	[e]	ND	7	ND	ND	ND		µg/m^3
Dichlorodifluoromethane (75-71-8)	0.26	1.5	7	0.65	1.2	7.9	4,950,000 (PEL)	µg/m^3
1,1-Dichloroethane (75-34-3)	[e]	ND	7	ND	ND	ND		µg/m^3
1,2-Dichloroethane (107-06-2)	[e]	ND	7	ND	ND	ND		µg/m^3
1,1-Dichloroethene (75-35-4)	[e]	ND	7	ND	ND	ND		µg/m^3
cis-1,2-Dichloroethene (156-59-2)	[e]	ND	7	ND	ND	ND		µg/m^3
trans-1,2-Dichloroethene (156-60-5)	[e]	ND	7	ND	ND	ND		µg/m^3
1,2-Dichloropropane (78-87-5)	[e]	ND	7	ND	ND	ND		µg/m^3
cis-1,3-Dichloropropene (10061-01-5)	[e]	ND	7	ND	ND	ND		µg/m^3
trans-1,3-Dichloropropene (10061-02-6)	[e]	ND	7	ND	ND	ND		µg/m^3
Ethylbenzene (100-41-4)	0.25	4.1	7	3.7	4.4	7.2	435,000 (PEL)	µg/m^3
4-Ethyl toluene (622-96-8)	0.25	1.3	7	ND	1.5	1.9		µg/m^3
Freon 11 (75-69-4)	0.26	1.3	7	0.82	1.2	4.7		µg/m^3
Freon 113 (76-13-1)	[e]	ND	7	ND	ND	0.4		µg/m^3
Freon 114 (76-14-2)	[e]	ND	7	ND	ND	ND		µg/m^3
Hexachlorobutadiene (87-68-3)	[e]	ND	7	ND	ND	ND		µg/m^3
2-Hexanone (591-78-6)	[e]	ND	7	ND	ND	ND		µg/m^3
Methyl t-Butyl Ether (1634-04-4)	[e]	ND	7	ND	ND	ND		µg/m^3
Methylene Chloride (75-09-2)	0.26	ND	7	ND	0.94	1.6	87,000 (PEL)	µg/m^3
4-Methyl-2-Pentanone (108-10-1)	0.25	ND	7	ND	2.6	5.7		µg/m^3
Styrene (100-42-5)	0.25	0.7	7	ND	0.74	0.9		µg/m^3
1,1,2,2-Tetrachloroethane (79-34-5)	[e]	ND	7	ND	ND	ND		µg/m^3
Tetrachloroethene (127-18-4)	0.25	0.58	7	0.6	0.81	5.2	170,000 (PEL)	µg/m^3
Toluene (108-88-3)	0.26	17	7	15	17	74	375,000 (PEL)	µg/m^3
1,2,4-Trichlorobenzene (120-82-1)	[e]	ND	7	ND	ND	ND		µg/m^3
1,1,1-Trichloroethane (71-55-6)	[e]	ND	7	ND	ND	0.65	1,900,000 (PEL)	µg/m^3
1,1,2-Trichloroethane (79-00-5)	[e]	ND	7	ND	ND	ND		µg/m^3

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Trichloroethene (79-01-6)	[e]	ND	7	ND	0.71	1.5	269,000 (PEL)	µg/m^3
1,2,4-Trimethylbenzene (95-63-6)	0.25	4	7	4.9	5	16	125,000 (PEL)	µg/m^3
1,3,5-Trimethylbenzene (108-67-8)	0.25	1.3	7	1.5	1.6	5	125,000 (PEL)	µg/m^3
Vinyl Acetate (108-05-4)	[e]	ND	7	ND	ND	ND		µg/m^3
Vinyl Chloride (75-01-4)	[e]	ND	7	ND	ND	ND		µg/m^3
m,p-Xylene (136777-61-2)	0.25	12	7	11	12	22	435,000 (PEL)	µg/m^3
o-Xylene (95-47-6)	0.25	4.5	7	4.2	4.8	12	475,000 (PEL)	µg/m^3

NOTES
NA = Not applicable
NAv = Not available
NS = Not sampled
ND = Not detected

[a] Sample counts minimums, medians, and maximums do not include outdoor sample results.

[b] Unit abbreviations:

%	percent of sample of vacuumed surface dust
µg/ft^2	micrograms per cubic foot
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/sample	micrograms per sample of vacuumed surface dust
CFU/g	colony-forming units per gram
CFU/in^2	colony-forming units per square inch
CFU/m^3	colony-forming units per cubic meter
EU/m^3	endotoxin units per cubic meter (10-15 EU = approx. 1 ng)
f/cc	fibers per cubic centimeter
fs/m^3	fungal structures/cubic meter
mg/kg	milligrams per kilogram
mg/m^3	milligrams per cubic meter
pCi/L	picoCuries per liter

[c] Screening limit abbreviations:

PEL	Washington Dept. of Labor & Industries (WISHA) Permissible Exposure Limit – 8-hr Time Weighted Average (TWA)
REL	National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit – 10-hr TWA
EPA	Environmental Protection Agency Recommendation
MTCA	Washington Dept. of Ecology Model Toxics Control Act Soil Cleanup Level

[d] Parameter between limit of detection and limit of quantitation.

[e] Detection limit = 25 ng/sample